

IN THE SPECIFICATION:

Please amend the specification as follows:

At pages "i" and "ii", delete the term "Page" at line 5 of page "i" and the page numbers and the series of dots, i.e. "....." in the Table of Contents.

On page 25, line 23, delete "Figure 3" and substitute therefor --Figure 4--.

On page 39, line 11, delete "NMAP" and substitute therefor --OMP21--.

On page 66, line 10, delete "_____" and substitute therefor "98878".

IN THE CLAIMS:

Please cancel non-elected withdrawn claims 1-8, 18, 19 and 22-70 without prejudice to Applicants' right to prosecute the subject matter of those claims in a subsequent application.

Please cancel claims 10, 14, 15, 17 and 21 without prejudice.

Please amend the claims as follows:

Sub 9
B' 9. (Amended) An isolated nucleic acid molecule encoding [the OMP21 of claim 1,] an OMP21 protein, [a complementary sequence thereof, a sequence substantially homologous thereto, or any fragment thereof,] wherein said OMP21 protein has an apparent molecular weight of about 16 kD to about 20 kD as determined by SDS-PAGE using trypsin inhibitor and carbonic anhydrase, respectively, as 21.5 kD and 31 kD molecular weight standards and comprises the amino acid sequence of SEQ ID NO: 1 or 7, or a complement of said nucleic acid molecule.

Sub 11
B' 11. (Amended) An isolated nucleic acid molecule encoding an OMP21 protein obtainable from a *M. catarrhalis* strain, said OMP21 protein having an apparent molecular weight of about 16 kD to about 20kD as determined by SDS-PAGE, using trypsin inhibitor and carbonic anhydrase, respectively, as 21.5 kD and 31 kD molecular weight standards and wherein said nucleic acid molecule comprises [comprising] a sequence selected from the group consisting of:

- a) a nucleic acid sequence of any of SEQ ID NO: 2-6 and 8-20, [a complementary sequence thereof; a sequence substantially homologous thereto, or any fragment thereof]

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CONT.
- b) a nucleic acid sequence encoding the deduced amino acid sequence of SEQ ID NO: 1 or 7 [a complimentary sequence thereof; sequence substantially homologous thereto, or any fragment thereof and];
- c) a nucleic acid sequence which hybridizes at 68°C in 0.5M NaHPO₄ (pH7.2)/ 1 mM EDTA/ 7 % SDS [under stringent conditions] to any one of the sequences of a) or b); and
- d) a nucleic acid sequence which is at least 70% identical to the sequence of SEQ ID NO. 6 when identity is determined using the BLASTN algorithm, said sequence encoding a polypeptide that elicits an immune response to *M. catarrhalis* when administered to an animal
or a complement of said nucleic acid molecule.

12. (Amended) Plasmid pOMP21X obtainable from *E. coli* Top10F' (pOMP21X), as deposited with the ATCC and assigned accession number 98878 [_____].

13. (Amended) A recombinant [expression] vector [adapted for transformation of a host cell,] comprising the nucleic acid molecule of claim 9, [10 or] 11, or the plasmid of claim 12.

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16. (Amended) A [transformed] host cell [containing an] transformed with the [expression] vector of claim 13.

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20. (Amended) A recombinant expression vector [adapted for delivery of a sequence encoding OMP21 to a host,] comprising the nucleic acid molecule of claim 9 [, 10 or] 11, or the plasmid of claim 12 operably linked to a nucleic acid for transcription and translation of said nucleic acid molecule encoding the OMP21 protein.

Please add new claims 71-78 as follows:

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71. (New) The isolated nucleic acid molecule of claim 9 or 11 further comprising a heterologous sequence.